

The popular culture of computer scientists... :
addendum — the future past.

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Abstract

The remaining X-Files : including one episode about an NSA whistleblower and one about a modern Oppenheimer or Midas.

Foreword

One of the great pleasures – few in an otherwise difficult task – derived from looking into the past is discovering hidden within it mirrors of our own days; but, painful too because simultaneously reflection of ourselves.

In this last addition to our study on representations of computer scientists we complete our review of *The X-Files* interrupted mid-way through only to create space for newer, less established media; and to give them the attention they deserve.

One of the last episodes entitled “*Trust No 1*” in particular strikes as prescient and of particular relevance to our contemporary times : there an NSA whistleblower tried to expose “*crimes against innocent people*”. (Broadcast January 2002.)

In another, a US Census Bureau employee does the same : “*Fight the Future*”.

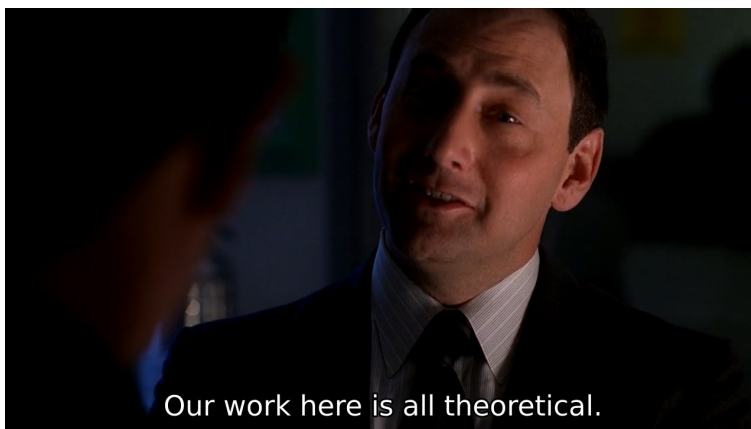


Figure 1: “Theoretical” scientist (*The X-Files*).

In another yet, a scientist makes assurances : “*Our work here is all theoretical.*”, he says – parrot to many current-day computer scientists.

He promises “indestructible things”; like his peers he lacks a proper education, and has not heard of the tale of Midas, who wanted to make everything gold, only to learn through dire experiences the consequences of his ideals, acts. “*Smart metals*” there, “smart homes” here.

The latest Turing Award was given to LeCun and Hinton – we have just learned. If the jury of this prize had agreed to pick the worst candidates possible, they would have come up with these same names.

What an upside-down culture!

Its members not only clueless of who they are, but more importantly who they could be. Or, maybe they “just didn’t care” ...

1 *The X-Files* (1993-2002)

1.1 Selected episodes

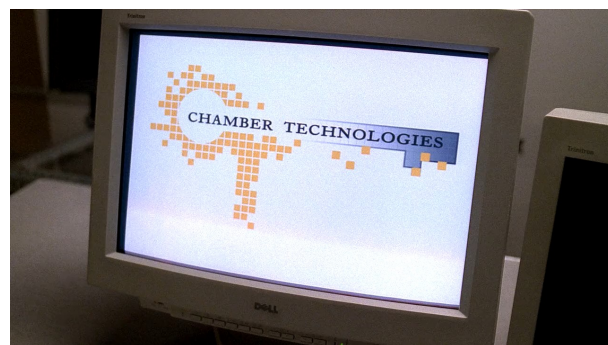
S08E09 (“Salvage”)	“purely theoretical” scientists with not-so theoretical results.
S08E16 (“Three Words”)	US Census Bureau whistleblower. (Lone gunmen re-unite with Mulder post-disappearance.)
S09E06 (“Trust No 1”)	NSA whistleblower.

1.2 Selected excerpts

S08E09



(a) The more conservative, respectable architecture preferred by some technology companies.



(b) Company logo.

Figure 2: Chamber Technologies in *The X-Files*.

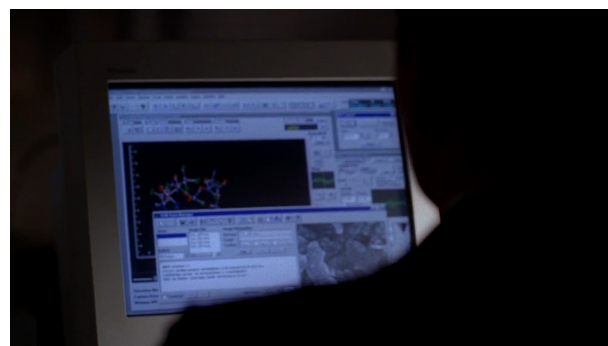
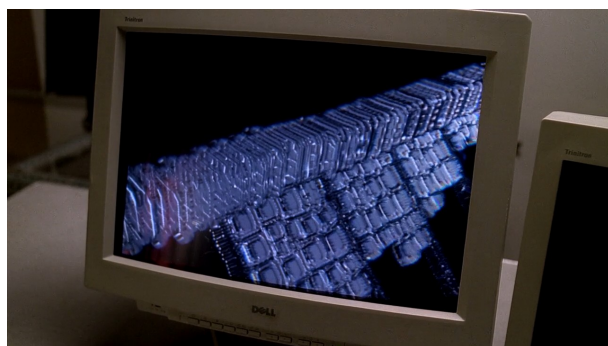


Figure 3: “smart” metals (l.) / computer program (r.).

Dr Puvogel - They're called "smart metals".
The idea is to one day build things that are indestructible.
Cars, equipment... Built of alloys with molecular memory.

(...)

Doggett - An employee number on the document was assigned to a Dr David Clifton.

Dr Puvogel - Uh, Dr Clifton's no longer here.

Doggett - What happened to him?

Dr Puvogel - He left the company.

(...)

Dr Puvogel - I don't deal with materials. Nor did Dr Clifton for that matter.
Our work here is ALL theoretical.



Figure 4: (computer) scientist under arrest.

Dr Puvogel - What's going on here?
It's not enough that my life's been threatened.
I'm being treated like a criminal.
Scully - And, not without cause.

S08E16

Scully - The Gunmen were able to decrypt the data that you found on Howard Salt's hard drive.
It was a series of file directories that were downloaded the day that he died.
Mulder - Downloaded from where?
Langly - The FSC: the Federal Statistics Center.
Byers - A government information bank used by the US Census Bureau where your Mr. Salt worked.

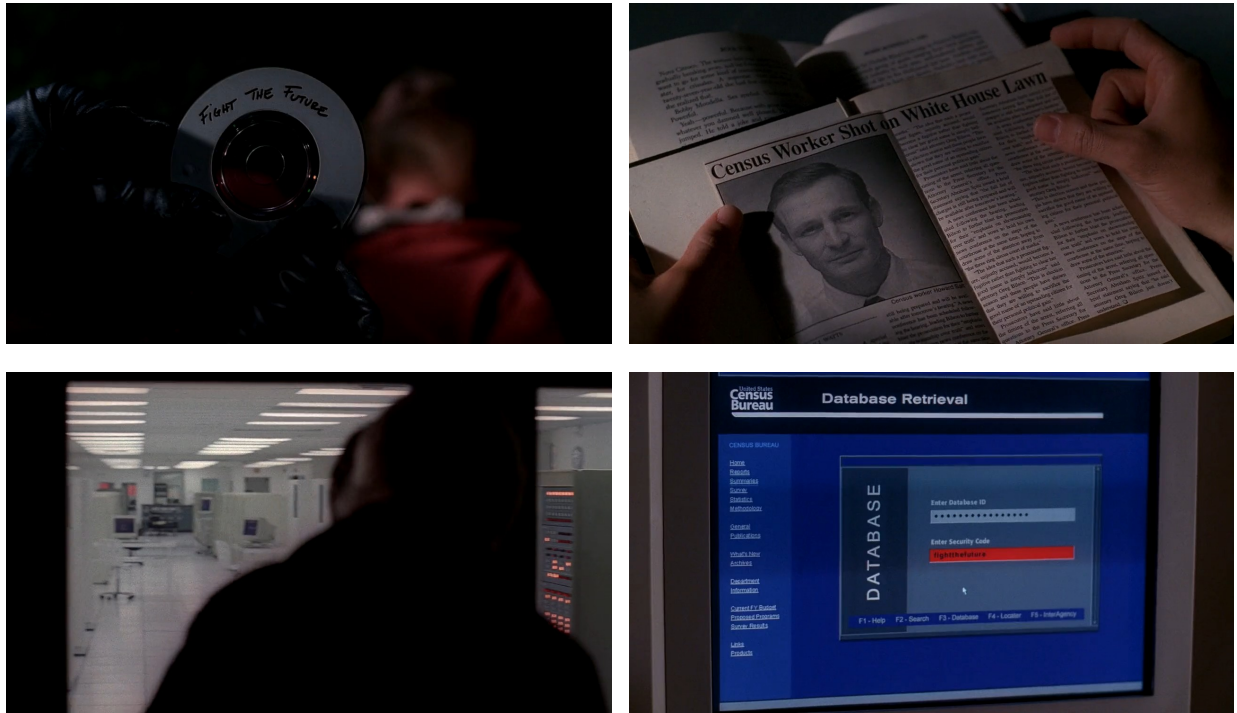


Figure 5: Howard Salt (above) / Federal Statistics Center (below).

Langly - And, even if you have a passcode, you still have to break into the FSC just to use it.
 (...)

Mulder - Well, just remember boys : this is America.
 Just because you get more votes, doesn't mean you win.

S09E06

Reyes - He says he has highly classified military files.

(...)

- I work for the National Security Agency.
 The name on my driver's license is false.
 If you were to call the police, I would be detained only long enough
 for another NSA agent to authorize my release.
 I don't exist as a citizen, nor does anyone I work with.

(...)

Doggett - How do you know anything about her (...)?
 - I know virtually everything about you.
 And you.
 And you.

(...)

Reyes - So you've been looking in this apartment with what? Cameras?

- Various forms of technology.

(...)

- My scope is limited.

I only look at what they tell me to. (...) But I have a supervisor (...)



Figure 6: (unmarked) NSA building – as depicted in *The X-Files*.

(...)
 Doggett - I ran a trace. (...) [but] got a node.
 Sector of six city blocks.
 Area's vacant except for this building.

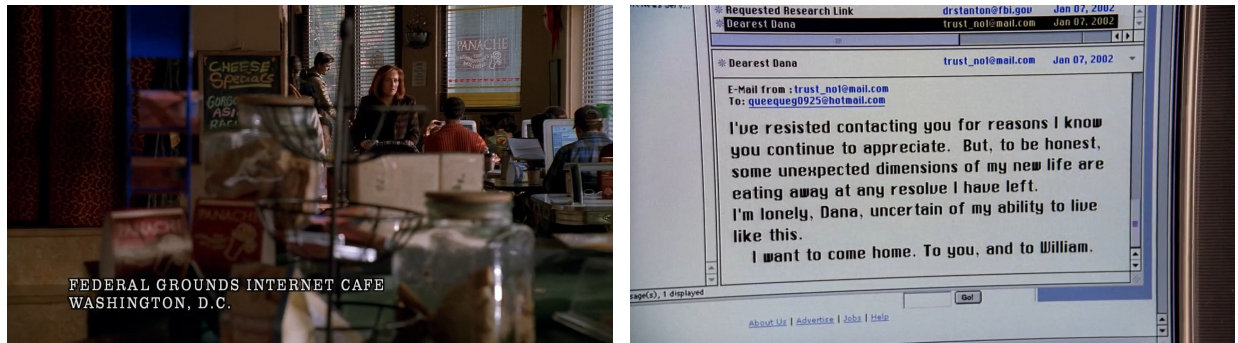


Figure 7: Internet cafe where the NSA agent(s) first appeared.



Figure 8: Scully closing shades (l.) / on the phone with NSA supervisor (r.).

NSA agent - They're watching.
 Doggett - They're watching?
 [Scully covers the windows.]

(...)

[*disguised voice]

NSA supervisor* - As my associate indiscreetly told you, we don't have names.

Scully - You've been listening to us?

NSA supervisor - It's all I could do after you closed the shades. Agent Scully.

Scully - You ever heard of the Constitution?

(...)
 Scully - What have they done?
 NSA supervisor - It's what they're prepared to do next.

(...)
 Scully - Tell me. I don't know how to reach him.
 NSA supervisor - But, you reached him yesterday.
 You sent him an e-mail. Would you like me to read it to you?
 Scully - Why should I trust you?

(...)
 Scully - We're in the middle of nowhere!
 NSA supervisor - There is no "middle of nowhere" any more.

(...)
 NSA supervisor - Your watch. Give it to me.
 Scully - This is ridiculous. This has gone far enough.

[She consents, he checks the watch, then gives it back to her.]

(...)
 NSA supervisor - Your size? I know your blood type, your resting heart rate,
 your childhood (...)
 I know the name of your college boyfriend, your true hair color, your ATM PIN number.
 Favorite charities, pet peeves.
 I know you spend too much time alone. And, I know that on one lonely night ...



Figure 9: Face-to-face meeting with NSA supervisor (*The X-Files*).

(...)
 NSA supervisor - I was as surprised as you are.
 Scully - Who authorizes you? I mean, what gives you the right? Who are you?!
 NSA supervisor - I'm the future



Figure 10: NSA agent spray painting over camera (*The X-Files*).

1.3 Notes

— In episode S08E16, as far as we know multiple invalid IP addresses (e.g. 320.xxx and 257.xxx) were displayed.

Character Langly commented “*I can’t get it uploaded, let alone start transmission*” (naively), while Mulder had just been shown successfully downloading from/to them; but both should be impossible in our current system, at least (range 0 - 255).

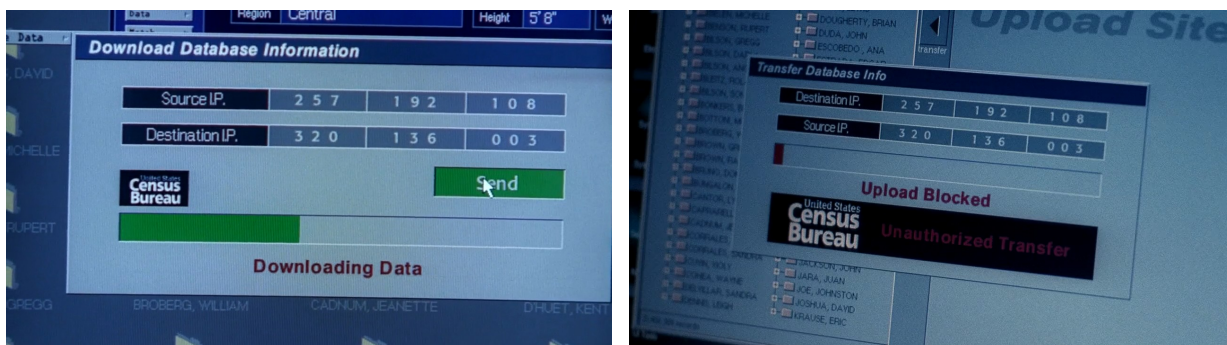


Figure 11: Mulder (left) / Langly (right) in S08E16.

— In episode S09E06, we characterized the (NSA) building shown in figure 6 as “unmarked” :

For real such buildings, see the *The Intercept*’s exemplary article “The NSA’s Hidden Spy Hubs in Eight U.S. Cities”.

— In the same episode, Mulder uses the e-mail address : `trust_no1@mail.com`.

The whistleblower insists on communicating with Mulder alone / only (by then quite well-known, if not public figure).

No visible form of encryption is used between Scully and Mulder.